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(54) Technique for embedding a code in an audio signal and for detecting the embedded code

(57) A code is embedded into an audio product so as to be processed therewith for recording and/or broadcast and yet be reliably detected while remaining inaudible to human perception. The code is represented by symbols formed from an impulse function having its energy within a specified frequency range. The audio product is analyzed to find segments which can mask the code based on tonality and a minimum signal energy. When the audio product with an embedded code is detected, decoding thereof involves finding candidate code signals which are checked against preset criteria. In particular, each symbol is made of at least two impulse functions with a preset spacing therebetween.

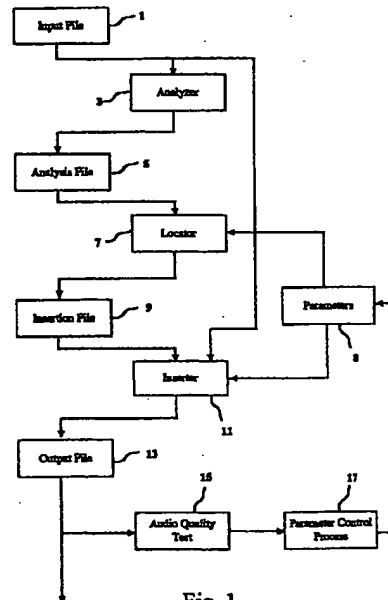


Fig. 1

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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 30 5532

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 May 2000	Examiner Quélavoine, R
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document	

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## EUROPEAN SEARCH REPORT

Application Number  
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<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>Δ : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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